

Claims

What is claimed is:

1. A hand-held electric machine tool with an at least partly rotary-driven tool receptacle (2) for a tool and a press switch (5) arranged at a handle (4) on the workpiece side for activating the connection of a power source (6) to an electric motor (7) connected to control electronics (10) that are connected to a force sensor (8), wherein the force sensor (8) is arranged between the tool receptacle (2) and the handle (4) and measures a pressing force (F) of the hand-held electric machine tool pressing against a workpiece.
2. The hand-held electric machine tool of claim 1, wherein the press switch (5) is a discrete switch.
3. The hand-held electric machine tool of claim 1, wherein the control electronics (1) are controllably connected to a mode selector switch (9).
4. The hand-held electric machine tool of claim 3, wherein a hammer element (3) is provided that is movable in an axially limited manner and that is axially displaceable with respect to the tool receptacle (2) by a maximum of 1 mm.
5. A control process for a hand-held electric machine tool (1) with a first at least partly rotary operating mode (I) for rotating a tool receptacle (2) for a tool, wherein the control is activated in a first step by actuating a press switch (5) arranged on the workpiece side of a handle (4) and, in a second step, the control controls the electric motor (7) depending upon a force measured by the force sensor (8), wherein the force is correlated with the pressing force (F) with which the hand-held electric machine tool (1) is pressed against the workpiece.
6. The control process of claim 5, wherein, in the second step, the sensitivity of the control with respect to the force measured by the force sensor (8) is carried out depending upon an activation period of the second step and increases progressively.

7. The control process of claim 6, wherein the control always controls the electric motor (7) above a minimum rotational speed which is dependent upon the operating mode (I, II) in the second step.

8. The control process of claim 7, wherein, in the second step, when a negative force is measured by the force sensor, the control controls the electric motor independent from the amount of negative force.

9. The control process of claim 8, wherein the control is deactivated in a third step when the press switch (5) is released.

10. The control process of claim 9, wherein the electric motor (7) is controlled independent from the force measured by the force sensor (8) in the second step in a second operating mode (III) selected by the mode selector switch (9).

11. The control process of claim 10, wherein the activation of the control is carried out in a non-rotary, second operating mode (IV, V) in the first step by one of a triggering actuation and a release of the press switch (5) within a trigger period of less than 0.5 s.

12. The control process of claim 11, wherein the control is deactivated by a repeated triggering actuation of the press switch (5) alternating with the first step over a time period of a maximum of 0.5 s.

13. The control process of claim 10, wherein the activation of the control is carried out in a non-rotary, second operating mode (VI) in the first step at a force peak measured by the force sensor (8) at greater than an activation force, within a trigger period of less than 0.5 s.

14. The control process of claim 13, wherein the control is deactivated in the third step in case the measured force is constantly less than a minimum force over an idling period.